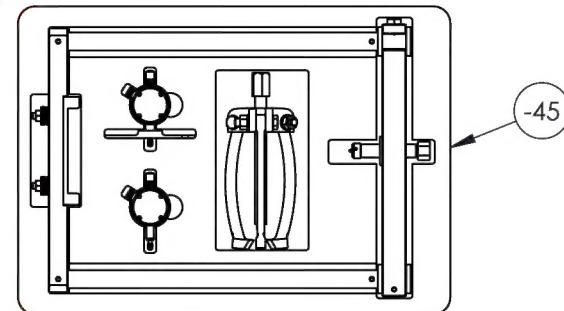
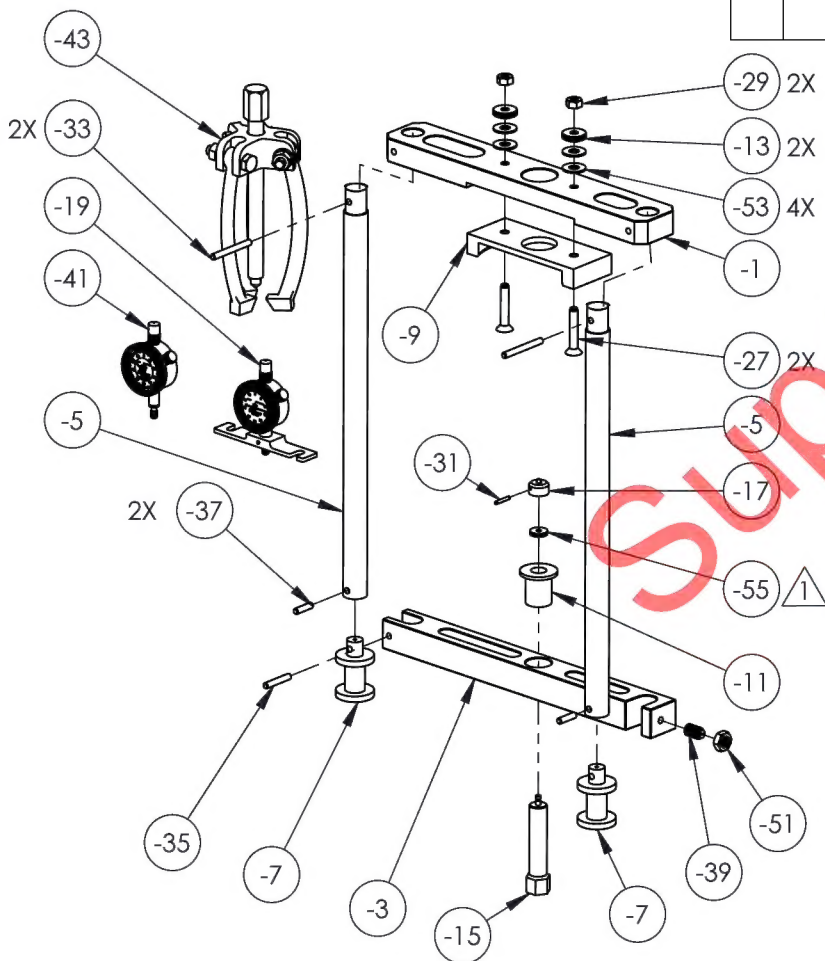


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REVISIONS			DATE	INITIAL	APPROVED
REV	ECR	DESCRIPTION			
2	16-0223	CH'D NOTE SHEET 1 WAS FOR THRUST BEARING -51 USE WASHER IN CAP -17 IS $\Delta$ FOR THRUST BEARING -55 USE 1 WASHER ON -15 SIDE. -1 CH'D DIM WAS 2X $\emptyset$ .6573/.6563 THRU ALL IS 2X $\emptyset$ .6573/.6563 THRU ALL (S.F. -5). CH'D DIM WAS 2X 1/4-20 UNC THRU ALL IS 2X 1/4-20 UNC -2B THRU ALL $\nabla$ $\emptyset$ .32 X 82° WAS 2X $\emptyset$ .1875/.1873 THRU ALL $\perp$ $\emptyset$ .1882/.1880 $\nabla$ 885 IS $\emptyset$ .1893/.1886 (S.F. -33). -3 CH'D DIM WAS 1/4-28 UNF THRU TO ID IS 1/4-28 UNF -2B $\nabla$ 50. WAS $\emptyset$ .8130/.8125 THRU ALL IS $\emptyset$ .8130/.8125 THRU ALL (P.F. -11). WAS $\emptyset$ .1875/.1873 THRU ALL IS $\emptyset$ .1874/.1869 THRU ALL (P.F. -35). ADDED ENGRAVE NOTE. -5 CH'D DIM WAS $\emptyset$ .5010/.5000 $\nabla$ 510 IS $\emptyset$ .5010/.5000 $\nabla$ 51 $\nabla$ $\emptyset$ .52 (S.F. -7). WAS $\emptyset$ .750 IS $\emptyset$ .75. WAS .1875/.1873 F.S. WALL $\emptyset$ .1882/.1880 N.S. WALL IS $\emptyset$ .1893/.1886 (S.F. -37). WAS $\emptyset$ .1875/.1873 THRU ALL $\perp$ $\emptyset$ .1882/.1880 $\nabla$ 200 IS $\emptyset$ .1874/.1869 THRU ALL (P.F. -33). -7 CH'D DIM WAS $\emptyset$ .4988/.4981 IS $\emptyset$ .4988/.4981 (S.F. -5). WAS 2X $\emptyset$ 1.200 IS 2X $\emptyset$ 1.20. WAS $\emptyset$ .1875/.1873 THRU ALL $\perp$ $\emptyset$ .1882/.1880 $\nabla$ 130 IS $\emptyset$ .1874/.1869 THRU ALL (P.F. -37). ADDED CENTER OK NOTE. -9 ADDED DIM 1.458. CH'D DIM WAS 2.915 ON CL IS 2.915. CH'D MATERIAL WAS WHITE NYLON/DELRI IN IS WHITE DELRI/ACETAL. -11 CH'D DIM WAS $\emptyset$ .8136/.8132 IS $\emptyset$ .8136/.8132 (P.F. -3). CH'D MATERIAL WAS 304 S.S. IS 303/304. -15 CH'D PART WAS MODIFIED B/O IS MANUFACTURED PART. CH'D DIM WAS (3X .670) IS 3X .665. ADDED DIM 3.20. ADDED MIN. THREAD RELIEF. -17 CH'D DIM WAS $\emptyset$ .625 IS $\emptyset$ .63. WAS $\emptyset$ .063 THRU ALL IS $\emptyset$ .065/.063 THRU ALL (P.F. -31). WAS $\emptyset$ .1563 $\pm$ .001 IS $\emptyset$ .1563 $\pm$ .0010. CH'D MATERIAL WAS 4140 IS 4140/4142. -15. -21 CH'D MATERIAL WAS STEEL IS 4140/4142. -15. -17. -21 ADDED HEAT TREAT RC 28-34. ADDED FINISH BLACK OXIDE SPEC QMSI-6.2.2. B.O. REVD. -21 CH'D DIM WAS $\emptyset$ .3755 $\pm$ .0010/- .0000 THRU ALL S.F. FOR -55 IS $\emptyset$ .3755 $\pm$ .0010/- .0000 THRU ALL (S.F. -25). WAS 6-32 UNC THRU TO ID IS 6-32 UNC -3B $\nabla$ 34. ADDED DIM 1.885. 1.458. -25 CH'D P/N WAS STARRETT #81-231J IS (MOTION INDUSTRIES #81-231J W/FBS). -39 CH'D P/N WAS #3408A531 IS 3408A551. -41 CH'D P/N WAS STARRETT #81-281J-8 IS (MOTION INDUSTRIES #81-281J-8 W/FBS). -45 DELETED DIMS 2X $\emptyset$ 1.700 $\nabla$ 875. 3.10. 7.70. 1.70. ADDED DIMS $\emptyset$ 1.70 $\nabla$ 1.09. $\emptyset$ 1.70 $\nabla$ 1.03. ADJUSTED CUT OUT FOR -43 TO FIT PROPERLY. CH'D CUT OUT FOR -19 & -41 SO GAUGES LAY FACE DOWN. CH'D DIM WAS 11.97 IS 12.36. CH'D MATERIAL & VENDOR WAS Y20 BLACK. IS ETHAFOAM CL20 BLACK CASE SOLUTIONS. CH'D DWG. TO SHEET METAL TOLERANCES. ADDED DETAIL B FOR CLARITY. -47 CH'D DIM 8X R.68. IS 4X R.68. ADDED DIMS 4X .75. 4X $\times$ 45°. CH'D MATERIAL WAS C200 BLACK FLAT. IS ETHAFOAM 220. -45. -47 CH'D DWG. TO SHEET METAL TOLERANCES. CH'D VENDOR WAS I.R. SPECIATIES IS CASE SOLUTIONS. -51 CH'D P/N WAS #90480A215 IS #94846A515.	11/15/2016	RJC	SM



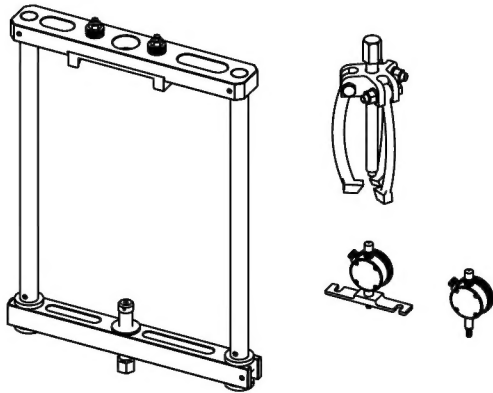
**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

NOTE:

$\Delta$  1 FOR THRUST BEARING -55 USE 1 WASHER ON -15 SIDE.

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101</b>	REV <b>2</b>
MAT'L HEAT TREAT FINISH SPEC DRAWN BY: GILBERT CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: MACKOVJAK SCALE: 1:6	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX $\pm$ .005 FRACTIONS $\pm$ 1/8 .XX $\pm$ .01 ANGLES $\pm$ 5° .X $\pm$ .1 SURFACES = 125/ $\sqrt{\phantom{x}}$ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL EUROCOPTER	
DATE 2/14/2012 SHEET 1 OF 14	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-25 CH'D P/N WAS STARRETT #81-231J IS (MOTION INDUSTRIES #81-231J W/FBS). -39 CH'D P/N WAS #3408A531 IS 3408A551. -41 CH'D P/N WAS STARRETT #81-281J-8 IS (MOTION INDUSTRIES #81-281J-8 W/FBS). -51 CH'D P/N WAS #90480A215 IS #94846A515.	11/15/2016	RJC	SM

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	TOP RAIL	6061		3
			-3	1	BOTTOM RAIL	6061		4
			-5	2	ROD	6061		5
			-7	2	ROD END	6061		6
			-9	1	WEAR PAD	WHITE DELRIN/ACETAL		7
			-11	1	BUSHING	303 / 304		8
		B/O	-13	2	THUMB NUT	STEEL	1/4-20 (MCMaster-CARR #92815A115)	1
			-15	1	FORCING SCREW	4140/4142		9
			-17	1	SCREW CAP	4140/4142		10
	X	B/O	-19	1	DIAL INDICATOR ASSY.			11
	1		-21		BASE	4140/4142		12
	1	B/O	-23		SET SCREW	S.S SILVER TIP	6-32 X 1/8 (MCMaster-CARR #99934A330)	11
	1	B/O	-25		DIAL INDICATOR		(MOTION INDUSTRIES #81-231J W/FBS)	11
		B/O	-27	2	SCREW	STEEL	1/4-20 X 1-1/2 (MCMaster-CARR #91263A564)	1
		B/O	-29	2	NUT	STEEL	1/4-20 (MCMaster-CARR #94895A029)	1
		B/O	-31	1	SPRING PIN	STEEL	Ø1/16 X 5/8 (MCMaster-CARR #90692A090)	1
		B/O	-33	2	DOWEL PIN	STEEL	3/16 X 1-3/4 (MCMaster-CARR #98381A515)	1
		B/O	-35	1	DOWEL PIN	STEEL	3/16 X 1-1/8 (MCMaster-CARR #98381A511)	1
		B/O	-37	2	DOWEL PIN	STEEL	3/16 X 3/4 (MCMaster-CARR #98381A508)	1
		B/O	-39	1	BALL-NOSE SPRING PLUNGER	STEEL	3/8-24 X 5/8 (MCMaster-CARR #3408A551)	1
		B/O	-41	1	DIAL INDICATOR		(MOTION INDUSTRIES #81-281J-8 W/FBS)	1
		B/O	-43	1	PULLER		KUKKO #45-2 (SAMSTAG SALES)	1
		B/O	-45	1	BOTTOM TOOL CUSHION	ETHAFOAM 220, BLACK	4.98 X 12.83 X 18.00 (CASE SOLUTIONS)	13
		B/O	-47	1	TOP TOOL CUSHION	ETHAFOAM 220, BLACK	1.79 X 12.77 X 17.94 (CASE SOLUTIONS)	14
		B/O	-49	1	CASE	PLASTIC	PELICAN #APP-1520-E	NS
		B/O	-51	1	THIN HEX NUT	STEEL	3/8-24 (MCMaster-CARR #94846A515)	1
		B/O	-53	4	WASHER	STEEL	Ø1/4 (MCMaster-CARR #90108A413)	1
		B/O	-55	1	THRUST BEARING		M14 OD MISUMI #BA0414	1
	ASSY -19							

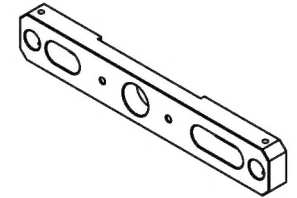
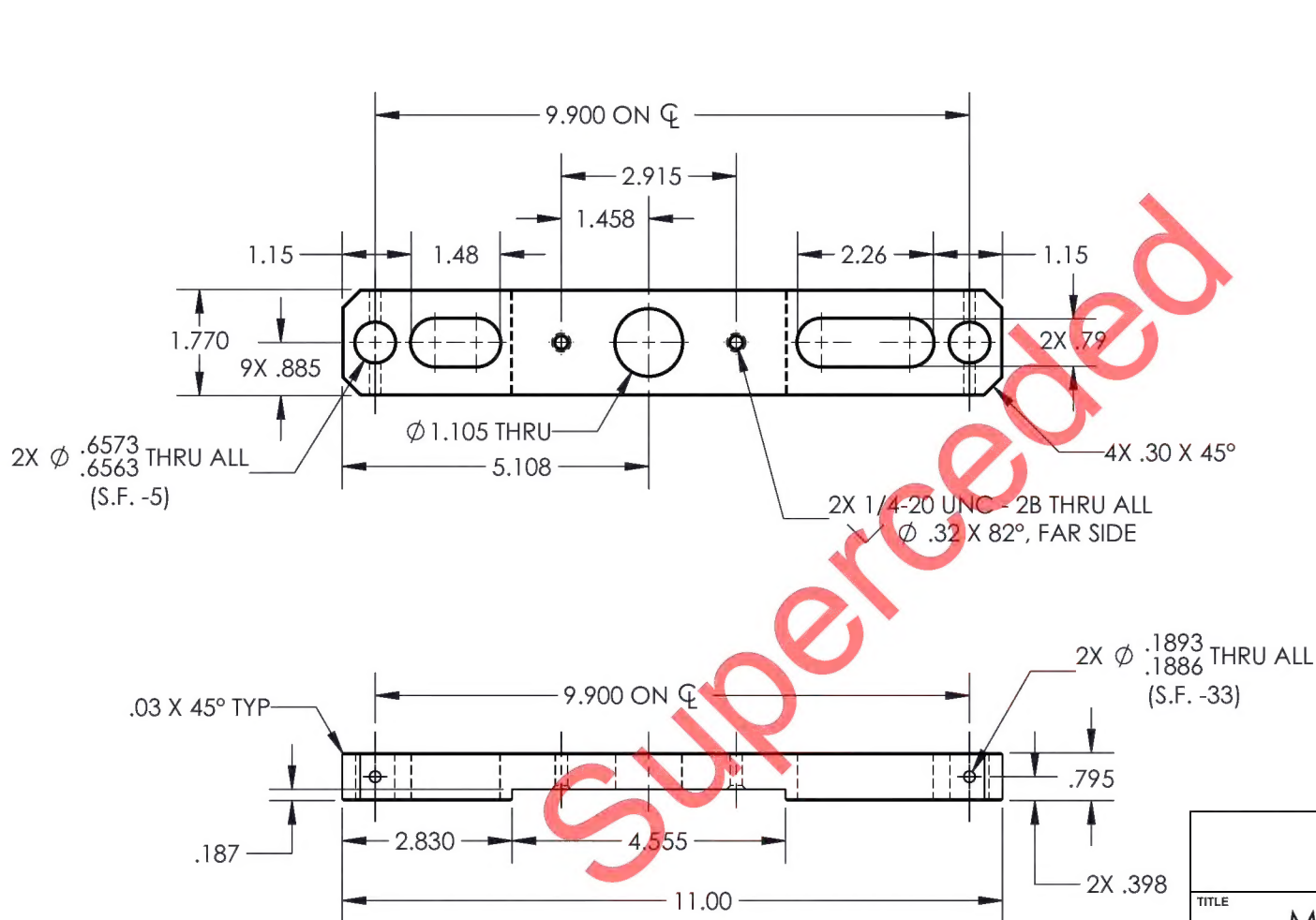
**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)



TITLE		M/R DAMPER TOOL KIT	
DWG NO.	RBEL133M-6201-101		REV 2
MAT'L	UNLESS OTHERWISE SPECIFIED		
HEAT TREAT	DIMENSIONS ARE IN INCHES		
FINISH	.XXX ± .005 FRACTIONS ± 1/8		
SPEC	.XX ± .01 ANGLES ± 5°		
	.X ± .1 SURFACES = 125°		
DRAWN BY:	GILBERT	1. BREAK ALL SHARP EDGES	
CHECKED:	DUERFELDT	.015 x 45° OR .015R	
OPPS APPR:	ANDERSON	2. DIMENSIONAL LIMITS APPLY	
QA APPR:	LINDSAY	AFTER PLATING	
APPROVED:	MACKOVJAK	3. INTERPRET DIM AND TOL PER	
SCALE	1:6	ASME Y14.5M-2009	
DATE	2/14/2012	USED ON MODEL	
		EUROCOPTER	
		SHEET 2 OF 14	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-1 CH'D DIM WAS 2X Ø.6573/.6563 THRU ALL IS 2X Ø.6573/.6563 THRU ALL (S.F. -5). CH'D DIM WAS 2X 1/4-20 UNC THRU ALL IS 2X 1/4-20 UNC -2B THRU ALL ✓ Ø.32 X 82°, WAS 2X Ø.1875/.1873 THRU ALL □ Ø.1882/.1880 ▽.885 IS Ø.1893/.1886 (S.F. -33).	11/15/2016	RJC	SM



**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

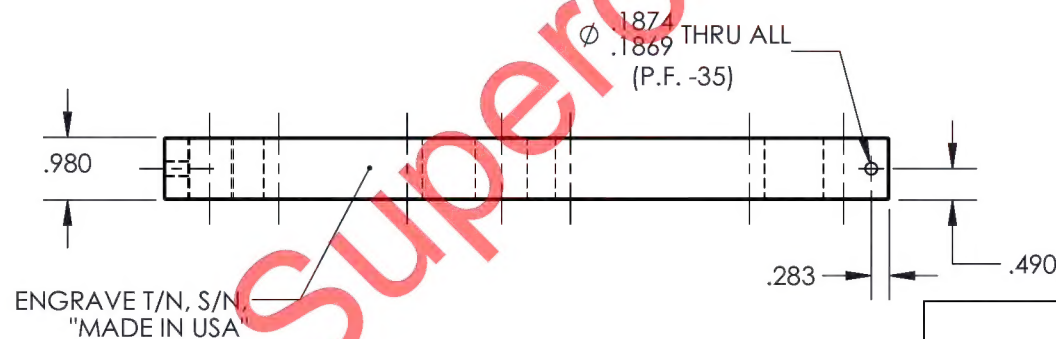
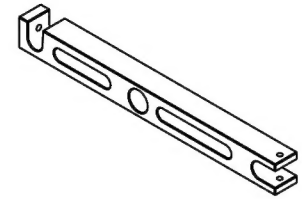
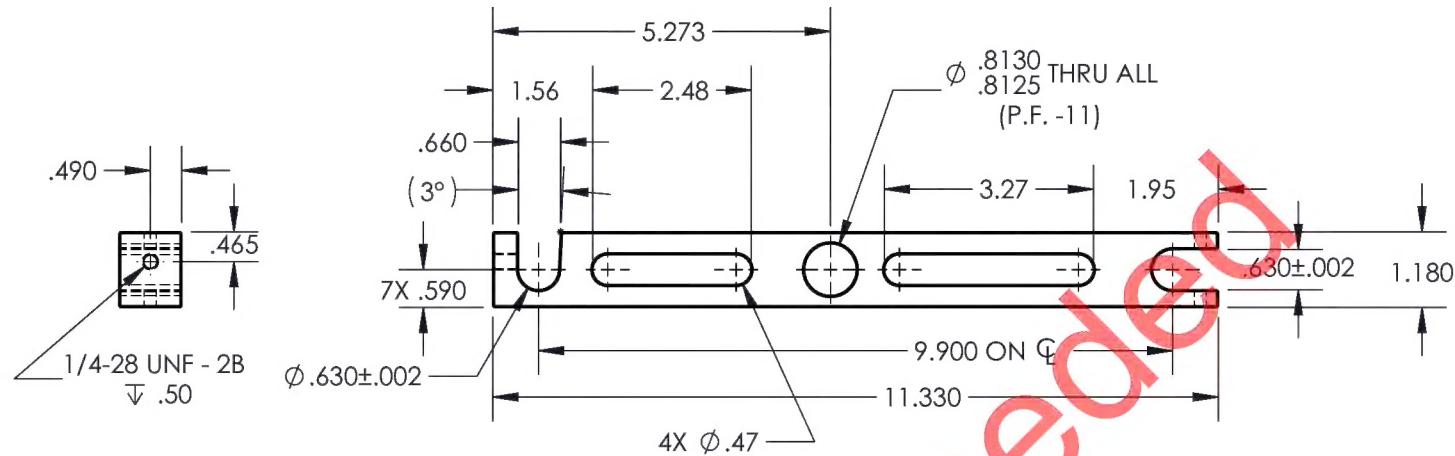
(-1)  
TOP RAIL

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-1</b>	REV <b>2</b>
MAT'L 6061	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX $\pm$ .005 FRACTIONS $\pm$ 1/8
FINISH CLEAR ANODIZE	.XX $\pm$ .01 ANGLES $\pm$ 5°
SPEC MIL-A-8625F, TYPE II, CLASS I	.X $\pm$ .1 SURFACES = 125 $\sqrt$
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 X 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EUROCOPTER
SCALE 1:3	DATE 2/14/2012
SHEET 3 OF 14	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-3 CH'D DIM WAS 1/4-28 UNF THRU TO ID IS 1/4-28 UNF -2B $\nabla$ .50, WAS $\varnothing$ .8130/.8125 THRU ALL IS $\varnothing$ .8130/.8125 THRU ALL (P.F. -11), WAS $\varnothing$ .1875/.1873 THRU ALL IS $\varnothing$ .1874/.1869 THRU ALL (P.F. -35), ADDED ENGRAVE NOTE.	11/15/2016	RJC	SM



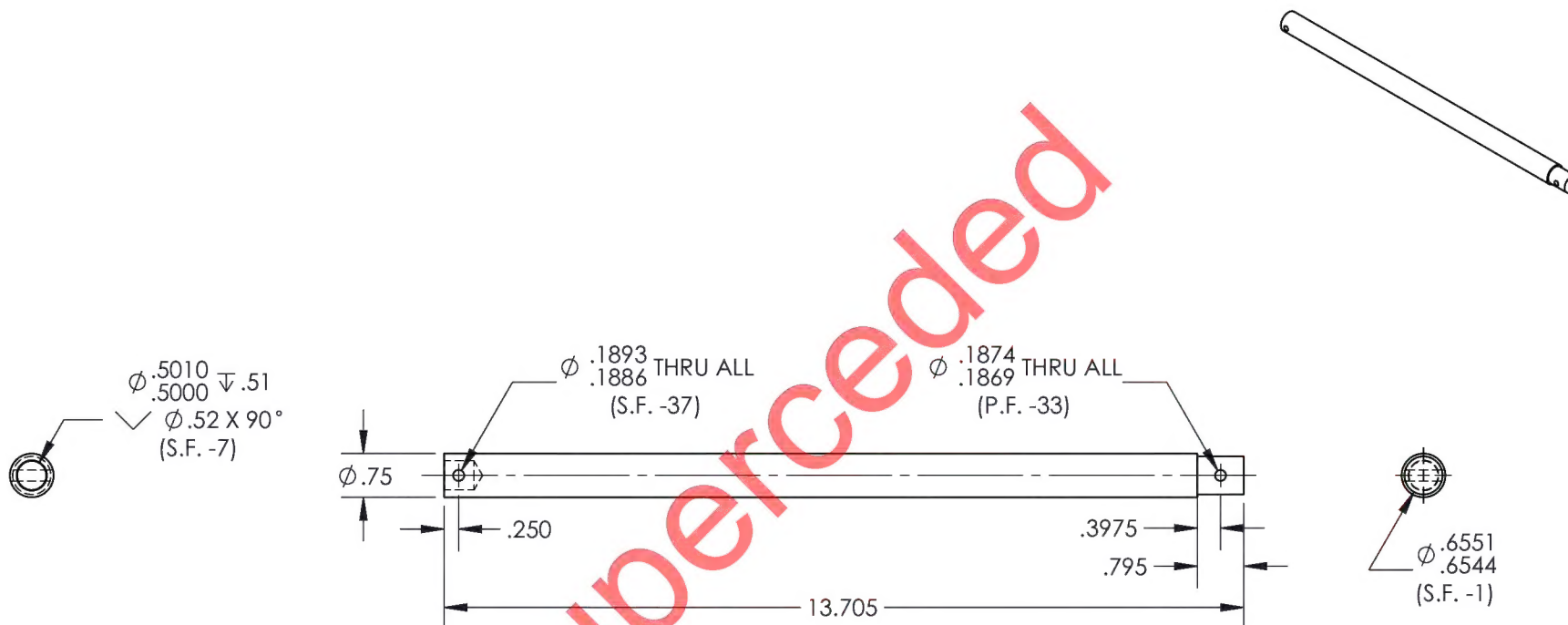
**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

(3)  
BOTTOM RAIL

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-3</b>	REV <b>2</b>
MAT'L 6061	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH CLEAR ANODIZE	.XX ± .01 ANGLES ± .5°
SPEC MIL-A-8625F, TYPE II, CLASS I	.X ± .1 SURFACES = 125 ✓
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EUROCOPTER
SCALE 1:3	DATE 2/14/2012
SHEET 4 OF 14	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-5 CH'D DIM WAS Ø.5010/.5000 $\nabla$ .51 IS Ø.5010/.5000 $\nabla$ .51 $\nabla$ Ø.52 (S.F. -7), WAS Ø.750 IS Ø.75, WAS .1875/.1873 F.S. WALL Ø.1882/.1880 N.S. WALL IS Ø.1893/.1886 (S.F. -37), WAS Ø.1875/.1873 THRU ALL $\square$ Ø.1882/.1880 $\nabla$ .200 IS Ø.1874/.1869 THRU ALL (P.F. -33).	11/15/2016	RJC	SM



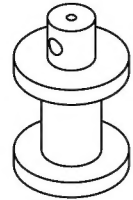
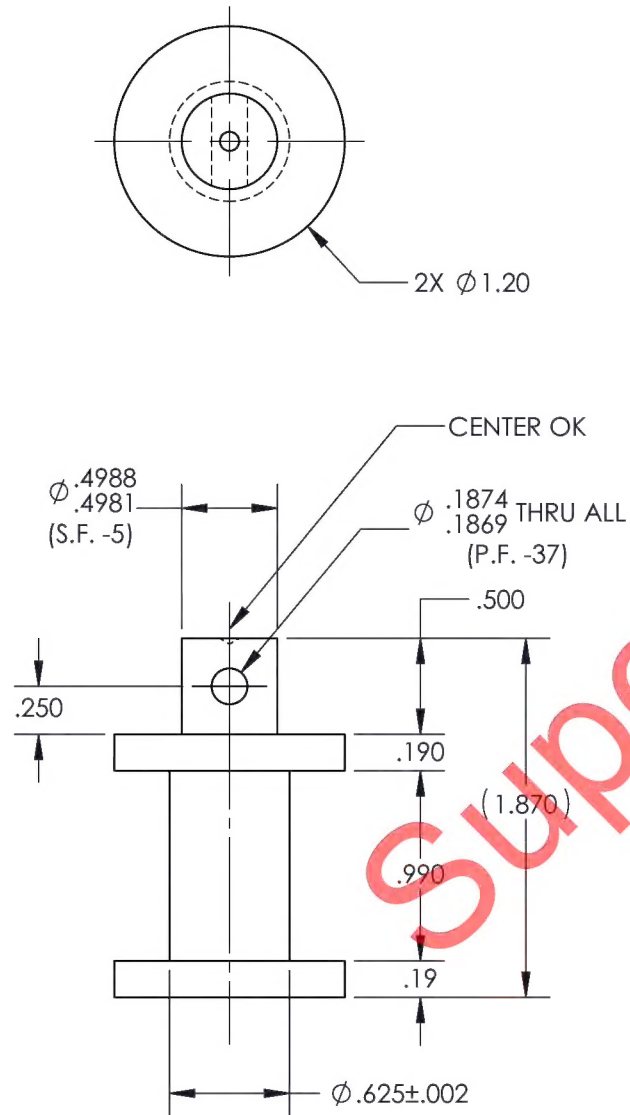
**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

(5)  
ROD

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-5</b>	REV <b>2</b>
MAT'L 6061 HEAT TREAT FINISH CLEAR ANODIZE SPEC MIL-A-8625F, TYPE II, CLASS I	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: <b>GILBERT</b>	USED ON MODEL
CHECKED: <b>DUERFELDT</b>	EUROCOPTER
OPPS APPR: <b>ANDERSON</b>	
QA APPR: <b>LINDSAY</b>	
APPROVED: <b>MACKOVJAK</b>	
SCALE <b>1:3</b>	DATE <b>2/14/2012</b>
SHEET 5 OF 14	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-7 CH'D DIM WAS Ø.4988/.4981 IS Ø.4988/.4981 (S.F. -5), WAS 2X Ø1.200 IS 2X Ø.120, WAS Ø.1875/.1873 THRU ALL L Ø.1882/.1880 Ψ.130 IS Ø.1874/.1869 THRU ALL (P.F. -37), ADDED CENTER OK NOTE.	11/15/2016	RJC	SM



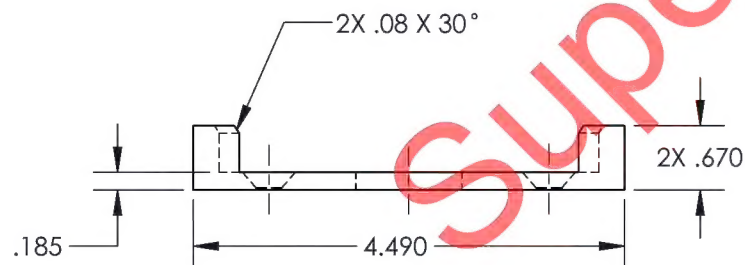
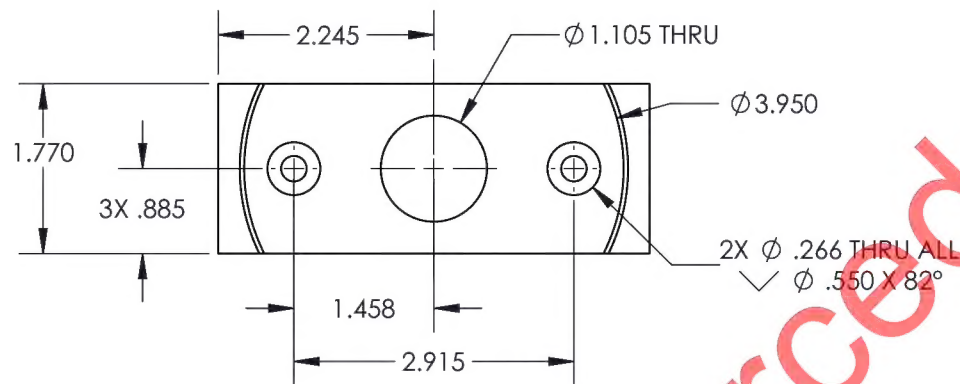
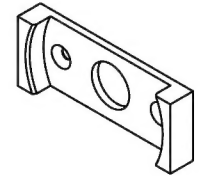
**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

(-7)  
ROD END

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-7</b>	REV <b>2</b>
MAT'L 6061	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH CLEAR ANODIZE	.XX ± .01 ANGLES ± 5°
SPEC MIL-A-8625F, TYPE II, CLASS I	.X ± .1 SURFACES = 125
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EUROCOPTER
SCALE 1:1	DATE 2/14/2012
SHEET 6 OF 14	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-9 ADDED DIM 1.458, CH'D DIM WAS 2.915 ON CL IS 2.915, CH'D MATERIAL WAS WHITE NYLON/DELIN IS WHITE DELIN/ACETAL.	11/15/2016	RJC	SM



(9)

WEAR PAD

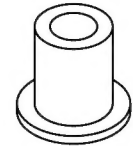
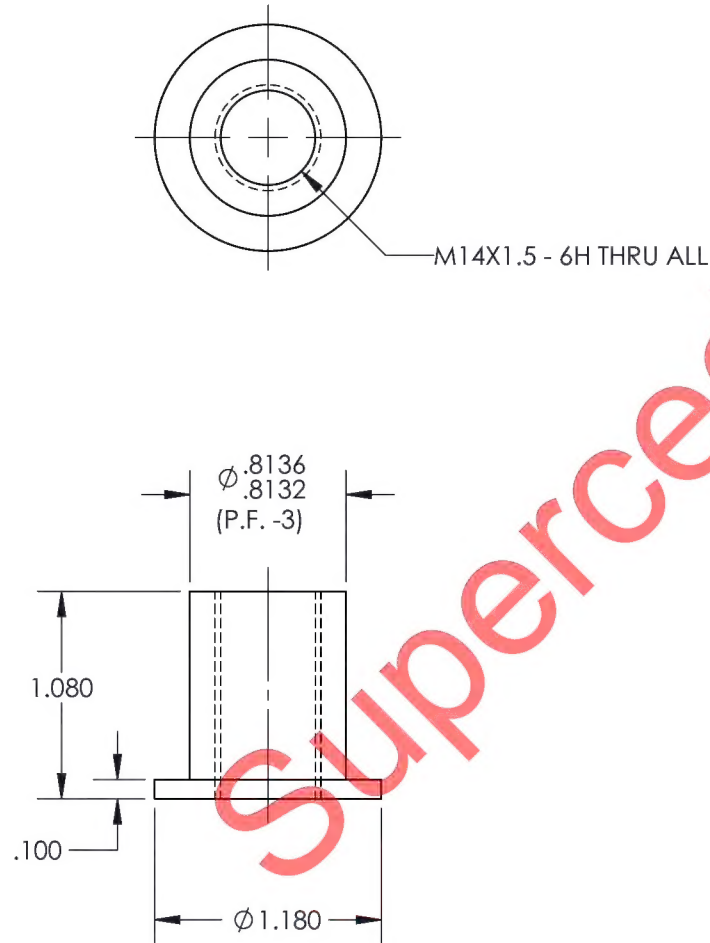
**UNDER REVIEW**

URF 19-733 19.05.23 (KPT)

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-9</b>	REV <b>2</b>
MAT'L WHITE DELRIN/ACETAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH	.XX ± .01 ANGLES ± .5°
SPEC	.X ± .1 SURFACES = 125° ✓
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EUROCOPTER
SCALE 1:2	DATE 2/14/2012
SHEET 7 OF 14	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-11 CH'D DIM WAS Ø.8136/.8132 IS Ø.8136/.8132 (P.F. -3), CH'D MATERIAL WAS 304 S.S. IS 303/304.	11/15/2016	RJC	SM



**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

(-11)

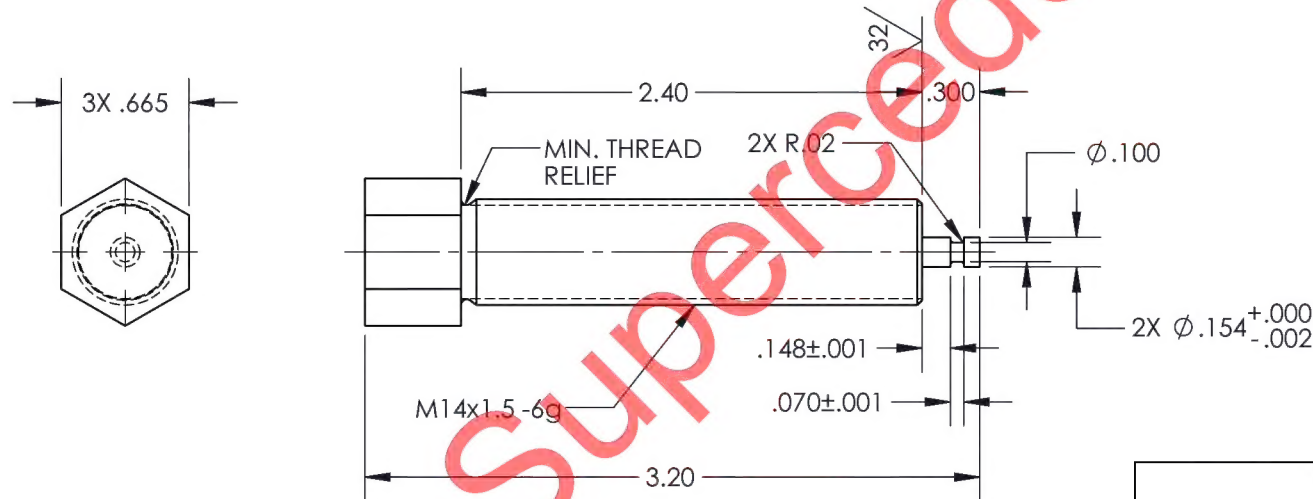
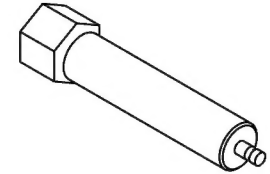
BUSHING

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-11</b>	REV <b>2</b>
MAT'L 303 / 304	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH	.XX ± .01 ANGLES ± .5°
SPEC	.X ± .1 SURFACES = 125° ✓
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EUROCOPTER
SCALE 1:1	DATE 2/14/2012
SHEET 8 OF 14	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-15 CH'D PART WAS MODIFIED B/O IS MANUFACTURED PART, CH'D DIM WAS (3X .670) IS 3X .665, ADDED DIM 3.20, ADDED MIN. THREAD RELIEF, CH'D MATERIAL WAS STEEL IS 4140/4142, ADDED HEAT TREAT RC 28-34, ADDED FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV D.	11/15/2016	RJC	SM



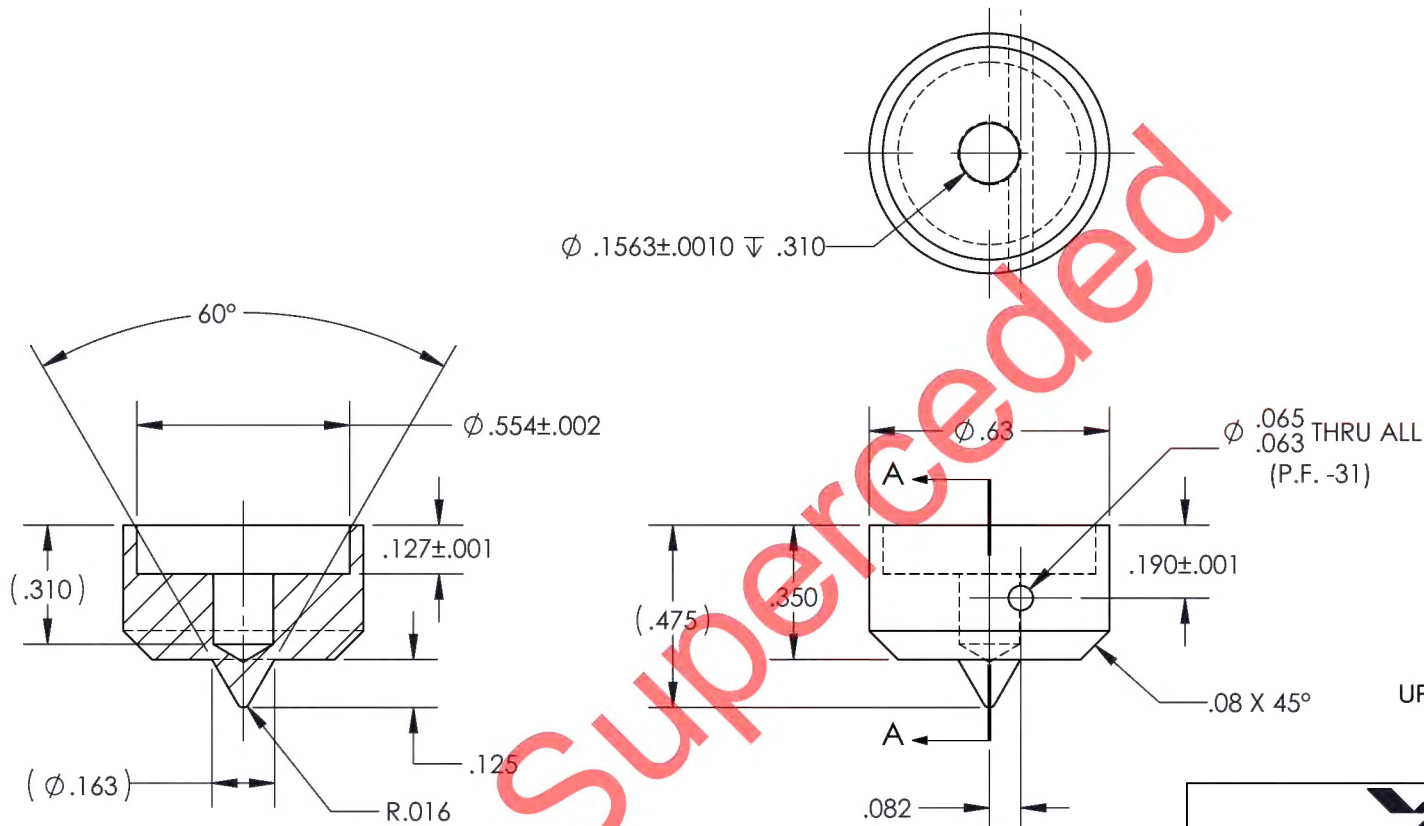
**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

(15)  
FORCING SCREW

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-15</b>	REV <b>2</b>
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 28-34	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: GILBERT	.X ± .1 SURFACES = 125
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: MACKOVJAK	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 2/14/2012	USED ON MODEL
SHEET 9 OF 14	EUROCOPTER

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-17 CH'D DIM WAS Ø.625 IS Ø.63, WAS Ø.063 THRU ALL IS Ø.065/.063 THRU ALL (P.F. -31), WAS Ø.1563 ±.001 IS Ø.1563 ±.0010, CH'D MATERIAL WAS 4140 IS 4140/4142, ADDED HEAT TREAT RC 28-34, ADDED FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV'D.	11/15/2016	RJC	SM



SECTION A-A

(-17)

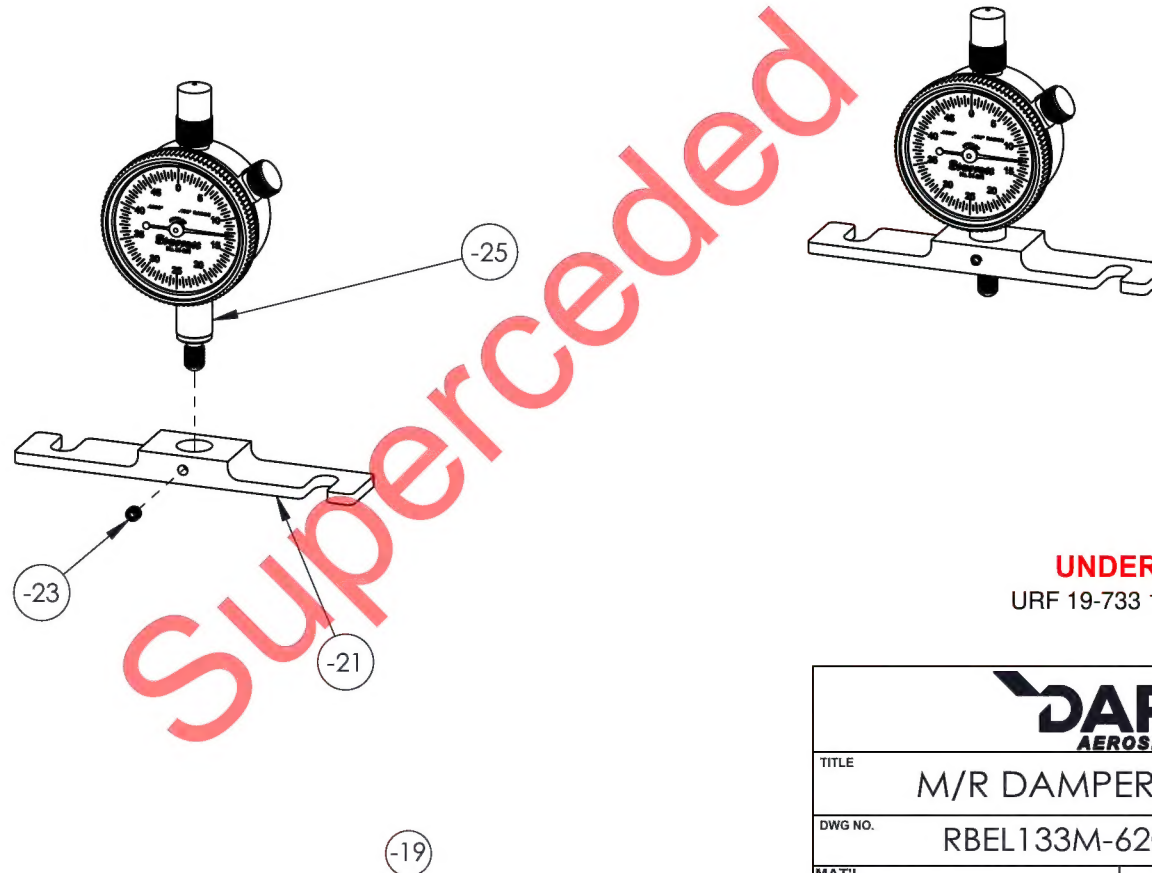
SCREW CAP

**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-17</b>	REV <b>2</b>
MAT'L 4140/4142 HEAT TREAT RC 28-34 FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV D	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: <b>GILBERT</b>	USED ON MODEL
CHECKED: <b>DUERFELDT</b>	EUROCOPTER
OPPS APPR: <b>ANDERSON</b>	
QA APPR: <b>LINDSAY</b>	
APPROVED: <b>MACKOVJAK</b>	
SCALE <b>2:1</b>	DATE <b>2/14/2012</b>
SHEET 10 OF 14	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED

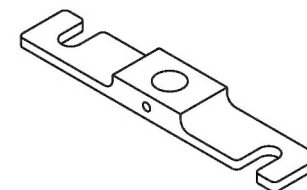



DIAL INDICATOR ASSY

**UNDER REVIEW**  
URF 19-733 19.05.23 (KPT)

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-19</b>	REV <b>2</b>
MAT'L TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125✓
DRAWN BY: <b>GILBERT</b>	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: <b>DUERFELDT</b>	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: <b>ANDERSON</b>	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: <b>LINDSAY</b>	USED ON MODEL
APPROVED: <b>MACKOVJAK</b>	<b>EUROCOPTER</b>
SCALE <b>1:2</b>	DATE <b>2/15/2012</b>
SHEET 11 OF 14	

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-21 CH'D DIM WAS Ø.3755 +.0010/- .0000 THRU ALL S.F. FOR -.55 IS Ø.3755 +.0010/- .0000 THRU ALL (S.F. -.25), WAS 6-32 UNC THRU TO ID IS 6-32 UNC -3B $\nabla$ .34, ADDED DIM 1.885, 1.458, CH'D MATERIAL WAS STEEL IS 4140/4142, ADDED FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV'D, ADDED HEAT TREAT RC 28-34.	11/15/2016	RJC	SM

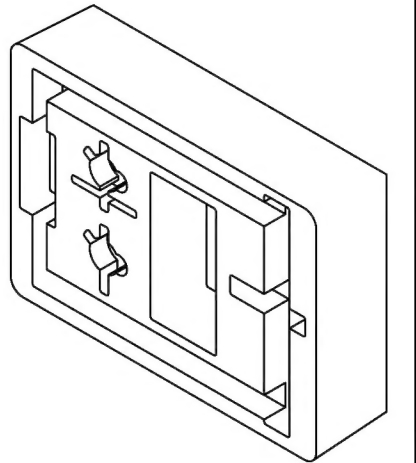
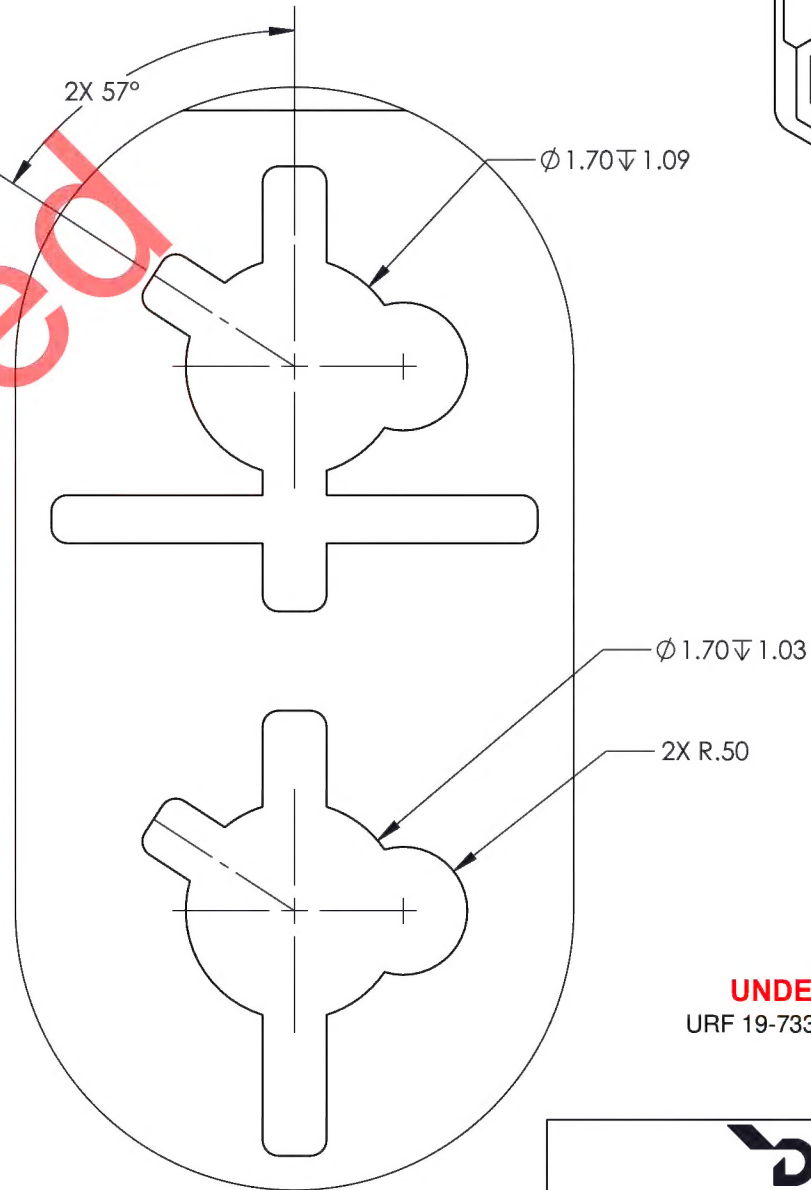
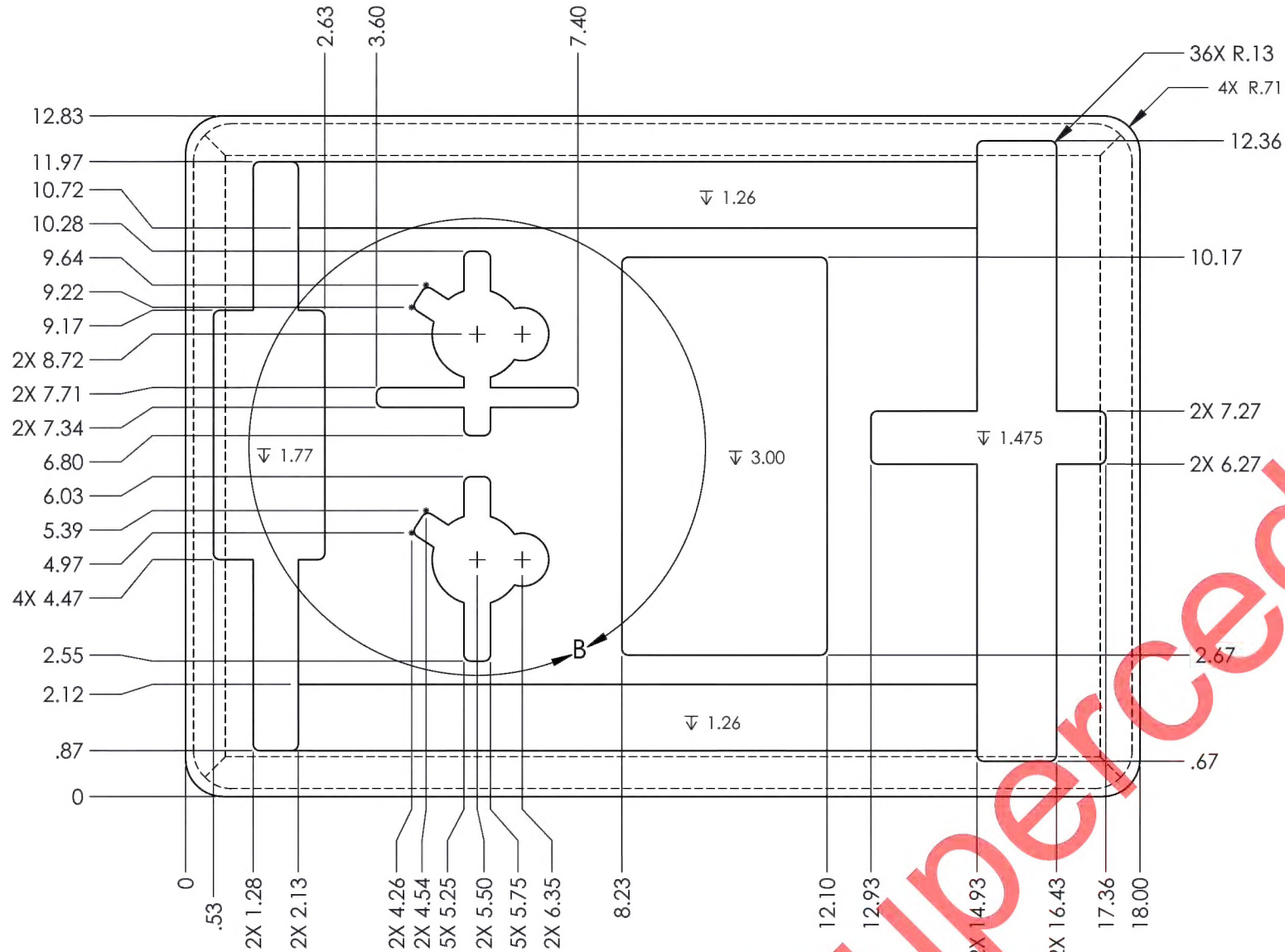


			
TITLE			
DWG NO. RBEL133M-6201-101-21			REV 2
MAT'L 4140/4142		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125/√	
HEAT TREAT RC 28-34			
FINISH BLACK OXIDE			
SPEC QMSI-6.2.2, B.O. REV D			
DRAWN BY: GILBERT			
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
OPPS APPR: ANDERSON			
QA APPR: LINDSAY			
APPROVED: MACKOVJAK			
		USED ON MODEL EUROCOPTER	
SCALE 1:1	DATE 3/22/2012	SHEET 12 OF 14	

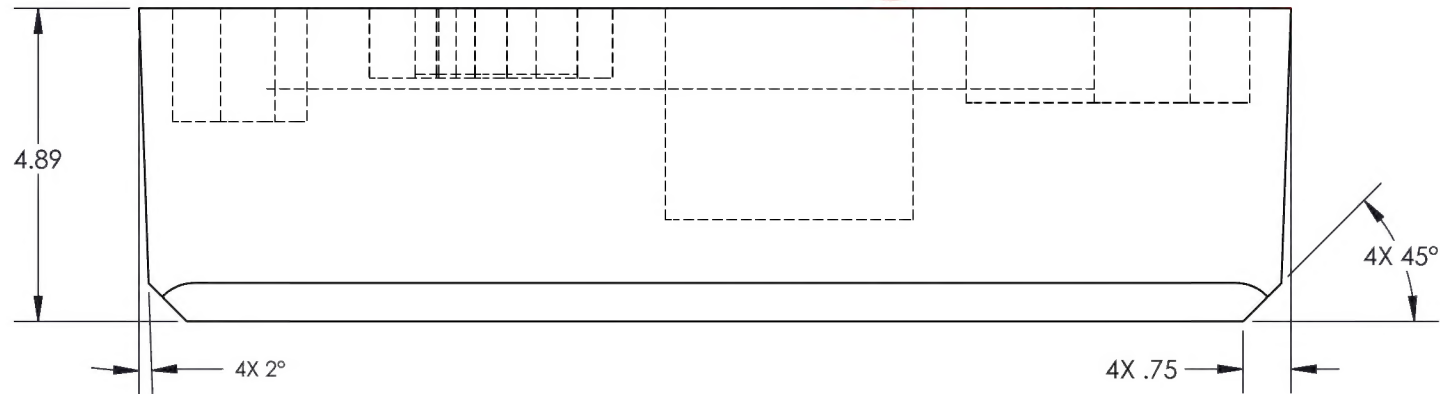


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REVISIONS			DATE	INITIAL	APPROVED
REV	ECR	DESCRIPTION			
2	16-0223	-45 DELETED DIMS 2X Ø1.700 $\nabla$ .875, 3.10, 7.70, 1.70, ADDED DIMS Ø1.70 $\nabla$ 1.09, Ø1.70 $\nabla$ 1.03, ADJUSTED CUT OUT FOR -43 TO FIT PROPERLY, CH'D CUT OUT FOR -19 & -41 SO GAUGES LAY FACE DOWN, CH'D DIM WAS 11.97 IS 12.36, CH'D MATERIAL & VENDOR WAS Y20 BLACK, IS ETHAFOAM 220 BLACK CASE SOLUTIONS, CH'D DWG. TO SHEET METAL TOLERANCES, ADDED DETAIL B FOR CLARITY.	11/15/2016	RJC	SM



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DETAIL B  
SCALE 2 : 3

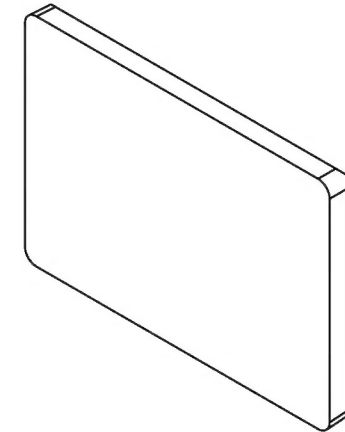
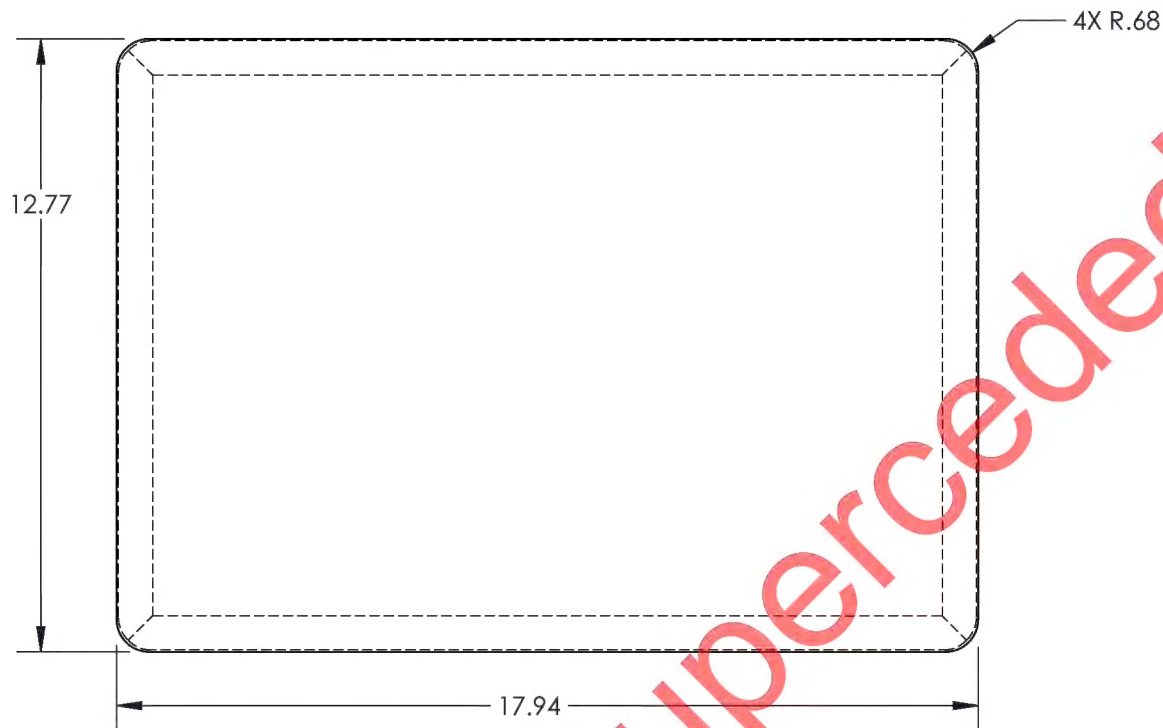
(-45)

BOTTOM TOOL CUSHION

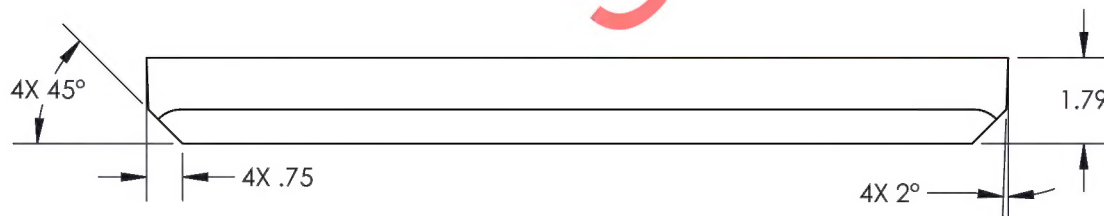
DART AEROSPACE		
TITLE M/R DAMPER TOOL KIT		
DWG NO. RBEL133M-6201-101-45	REV 2	
MAT'L ETHAFOAM 220, BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS $\pm$ 1/8 ANGLES $\pm$ 1° SURFACES = 125/	
HEAT TREAT FINISH SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: GILBERT	USED ON MODEL	
CHECKED: DUERFELDT	EUROCOPTER	
OPPS APPR: ANDERSON		
QA APPR: LINDSAY		
APPROVED: MACKOVJAK		
SCALE 1:3	DATE 3/22/2012	SHEET 13 OF 14

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0223	-47 CH'D DIM 8X R.68, IS 4X R.68, ADDED DIMS 4X .75, 4X X 45°, CH'D MATERIAL & VENDOR WAS C200 BLACK FLAT, IS ETHAFOAM 220 BLACK CASE SOLUTIONS, CH'D DWG. TO SHEET METAL TOLERANCES.	11/15/2016	RJC	SM



**UNDER REVIEW**  
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(-47)

TOP TOOL CUSHION

<b>DART AEROSPACE</b>	
TITLE <b>M/R DAMPER TOOL KIT</b>	
DWG NO. <b>RBEL133M-6201-101-47</b>	REV <b>2</b>
MAT'L ETHAFOAM 220, BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH	.XX ± .03 ANGLES ± 1°
SPEC	.X ± .1 SURFACES = 125/✓
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EUROCOPTER
SCALE 1:4	DATE 2/14/2012
SHEET 14 OF 14	